furnace was filled up in this manner lie began to cast therefrom in regular periods, whilst corresponding quantities afore and pig iron were thereafter charged. The process became a continuous one in the manner described. But only decau-burised metal is obtained in the furnace, and recarburisation in the ladle must be adopted, since otherwise the ferro-manganese required would be inordinately increased.

At the commencement, it was feared that much destruction must be caused by damage to the bottom. It has, however, proved that these fears were groundless, inasmuch as the reactions take place in the upper portion of the bath, and the actual bottom does not become injured. On the contrary, the banks are attacked at the slag line and must be repaired after each charge, which, however, is able to be done without . difficulty.

Since melting down is saved by such a method of working, and the treatment of metal is,set up when it is of similar composition throughout, to a pig and scrap charge, on completion of melting down, and since this admits of finishing in a short time, one ascribed to the Talbot process the capacity of achieving very large production. One overlooked that carbon elimination by means of ore gave rise to a large heat requirement, which Campbell had pointed out as a result. In addition, also, the pig iron must be heated up from the temperature of molten pig iron to the higher temperature of castable steel, and the furnace must furnish the entire demands of heat likewise. But this requires time. On this ground, the expectations as. to the productive capacity of the Talbot process were not quite fulfilled, and it was sought to enforce the object in view by increasing the capacity of the furnaces.

K. Poech describes in " Stahl und Eisen," 1906, p. 1801 el seq., the newest Talbot plants of the Cargo Fleet Works in Middlesbrough, and the Jones & Laughlin Steel Company in Pittsburgh.

The former comprises three tipping furnaces of 175 tons capacity each ; the latter has furnaces with a capacity of about 200 tons. The method of working is essentially the same for both plants. After pouring off 50 tons of steel, the additions